



PATENT

Docket No.: W5020.0128/P128

*T.H.*  
*8-11-99*  
*#10 / fcs*  
*Patent.*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of:  
Michael A. Waters

Serial No.: 08/997,879

Group Art Unit: 3732

Filed: December 24, 1997

Examiner: T.E. Manahan

U.S. Patent No. 5,477,812

For: AUTOMATED SELF-CLEANING  
LITTER BOX FOR CATS

Assistant Commissioner for Patents  
Washington, D.C. 20231

SUBMISSION OF LETTERS PATENT

Dear Sir:

Responsive to the Office Action dated February 5, 1999, and pursuant to the provisions of 37 C.F.R. § 1.178, Applicant herewith submits the above-referenced original Letters Patent. Entry of the April 5, 1999 Amendment is requested. During a telephone interview on August 5, 1999, the Examiner confirmed that the submission of this Letters Patent, along with the April 5, 1999 Amendment, would overcome all outstanding objections and rejections. The Examiner confirmed that it would not be necessary to file a Notice of Appeal to obtain entry of the April 5, 1999 Amendment.

A petition for an extension of time is being filed concurrently herewith. Please charge any fees due in connection with this paper to Deposit Account 04-1073.

Allowance of the reissue application is requested.

Dated: August 5, 1999

Respectfully submitted,

By 

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*Has received an application for a patent  
for a new and useful invention. The title  
and description of the invention are en-  
closed. The requirements of law have  
been complied with, and it has been de-  
termined that a patent on the invention  
shall be granted under the law.*

Therefore, this

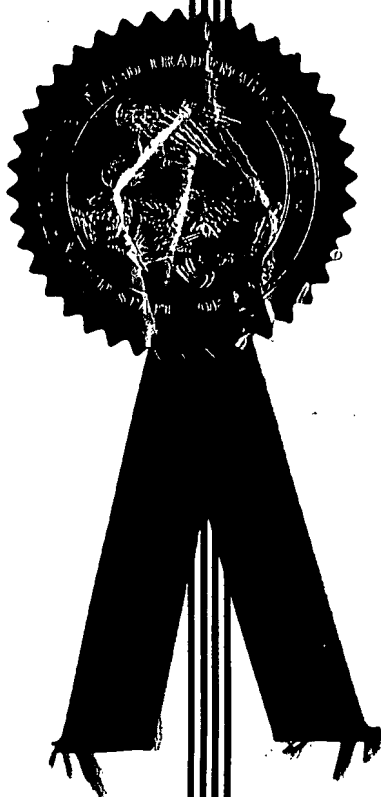
United States Patent

*Grants to the person or persons having  
title to this patent the right to exclude  
others from making, using or selling the  
invention throughout the United States  
of America for the term of seventeen  
years from the date of this patent, sub-  
ject to the payment of maintenance fees  
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Bence Lehman

Commissioner of Patents and Trademarks

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*Bruce Lehman*

Commissioner of Patents and Trademarks

*Diane Lury*

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US005477812A

**United States Patent** [19]**Waters**[11] **Patent Number:** **5,477,812**[45] **Date of Patent:** **Dec. 26, 1995****[54] AUTOMATED SELF-CLEANING LITTER BOX FOR CATS****[75] Inventor:** **Michael A. Waters**, Barrington Hills, Ill.**[73] Assignee:** **Waters Research Company**, Elgin, Ill.**[21] Appl. No.:** **371,782****[22] Filed:** **Jan. 12, 1995****[51] Int. Cl.<sup>6</sup>** ..... **A01K 1/035****[52] U.S. Cl.** ..... **119/163; 119/166****[58] Field of Search** ..... **119/163, 164, 119/166, 161, 165****[56] References Cited****U.S. PATENT DOCUMENTS**

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**Primary Examiner**—Todd E. Manahan**Attorney, Agent, or Firm**—Dorn, McEachran, Jambor & Keating**[57] ABSTRACT**

An improved automated self-cleaning litter box for cats, of the kind having a housing defining an upwardly open chamber for storage of a supply of cat litter, accessible to a cat and having path members on opposed side walls defining a comb path from one end of the chamber to the other. A comb, normally stored at the comb storage end of the chamber, is driven forward along the path to the discharge end of the chamber and back to its original storage position. As the comb traverses the chamber forwardly it engages any clumps of waste in the litter and carries them to a disposal receptacle at the discharge end of the chamber. The improvement includes a sensor for sensing the presence of a cat in the litter chamber; a photo electric sensor is preferred, but an infra red, weight, or even an audible sensor can be used. A delay device actuates the comb drive a predetermined time interval after the sensor ceases to sense the presence of a cat in the litter chamber. In the improved construction the comb path includes multi-perforate track members on opposite sides of the litter chamber; those tracks are engaged by rotatable drive wheels connected to the comb. The comb drive includes a reversible electric motor, mounted on the same carriage as the comb. A transparent, biodegradable receptacle is used; alarms for a full receptacle and for an insufficient litter supply are provided.

**22 Claims, 7 Drawing Sheets**